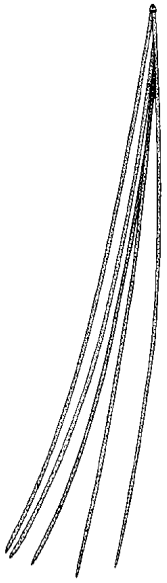
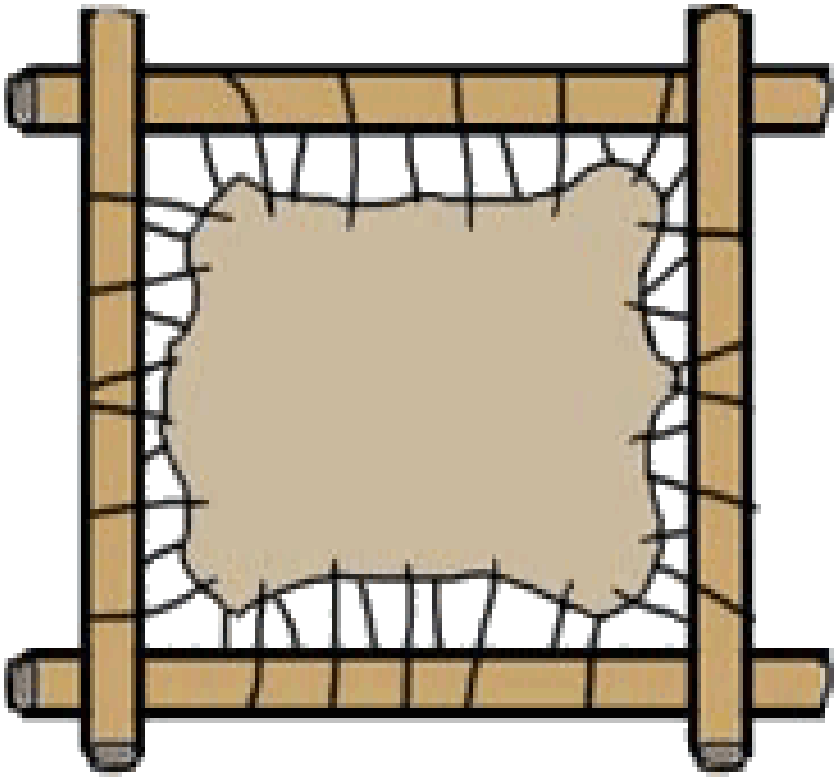
TANNING



Our ancestors were clothed in skins, every garment meticulously tanned and customized. Their clothing was silent when they moved, windproof and breathable, soft like a shammy and naturally camouflaged to their environment. Processing animals is hard and sometimes risky work but the rewards are incredibly gratifying. Preserving animal hides that would rot on the road or otherwise be discarded is a great way to honor the animals life. The hides you tan,
 if properly cared for, can last generations.

White Pine Tanning Guild on YouTube
https://www.youtube.com/playlist?list=PL6cF8eGs4ZB67DFdo7jZGcS079gxw9_BC

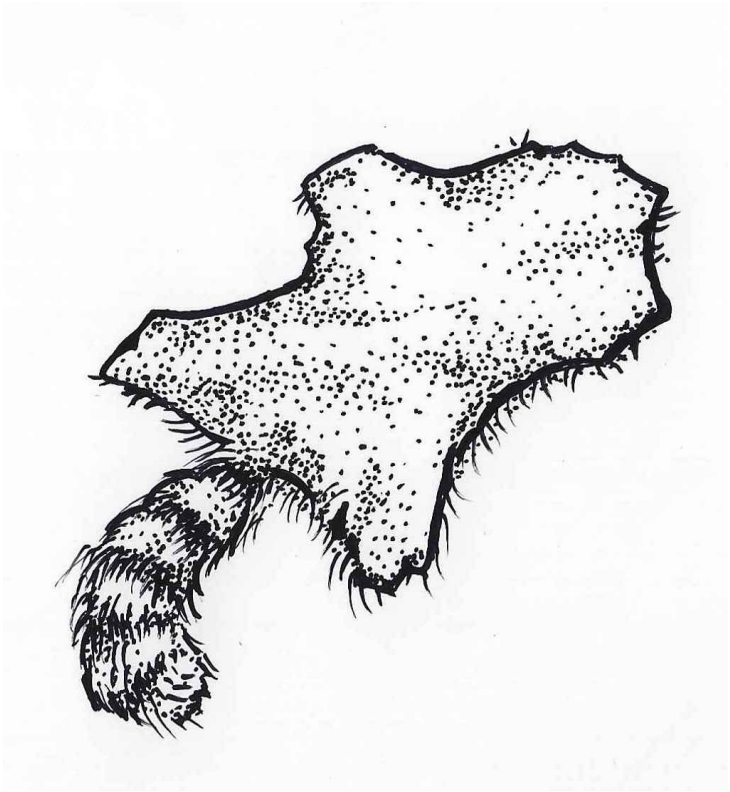


brain tanned fur

The art of tanning small game animals is very different than hair off deer. Small game animals can be case-skinned or split skinned. Winter coats are prized for their beauty and warmth. Harvesting roadkill coyotes, squirrel, mink, raccoon, or skunk is a wonderful way to honor these beautiful animals who are otherwise discarded by our fast paced society. Follow these steps with guidance…
-skin
-flesh
(rawhide stage)
-shampoo
-brain
-break
-smoke
-rebrain and break if necessary

Tier 1

Present your Tanning EDC (See Leaders Packing and Caching Guild)



brain tanned deer

Most hunters discard the hides of the deer they hunt while only saving the meat. How times have changed. In the frontier days venison was considered lean and inferior meat and deer were hunted primarily for the precious resource of their hides for clothing. In fact, buckskin was such a prized item of trade that it became the standard currency on the frontier, hence the term bucks $.

Brain Tanning a deer hide follows the same steps as a small game fur, except for the additional steps of bucking, graining and neutralizing. These steps involve chemistry and should be practiced with guidance. Tanning is a resource heavy skill that requires lots of water, wood and elbow grease. Work with others to try to “batch” projects. Like making an announcement a week ahead of time that you are going to be preparing a Bucking or Braining solution.

Plan on spending a week or two with a total of about 15 hours of labor to finish your hide. You’ll need to be present as much as possible to check on your hide as it goes through this incredible transformation. Your first hide may not be the softest and could look like swiss cheese. That’s ok, you have honored a resource that would have otherwise been discarded. Keep practicing, before you know it you’ll be turning out luxurious brain tanned hides that you can make clothing and moccasins with, make high value trades, sell at powwows and rendezvous for top $, gift to others in ceremony or use to honor your students in a Band Right of Passage Ceremony.

1. Skinning - Removing the hide. Make a long slit on the belly and circular slits around the legs and neck. Take care if you are skinning alone, it's best to hang the deer and pull the hide off.

2. Fleshing - Fleshing is removing all of the fat, flesh and connective tissue from the “flesh” side of the hide. Use a quality fleshing beam and fleshing knife. Flesh the same day as skinning and dry the hide immediately by hanging in a covered area, try to avoid hot sun.

3. Bucking - This is a critical step where many hides are lost to simple mistakes. Bucking is the process of soaking the hide in a high PH solution in order to swell the layers of skin to make graining easier. It also makes the hide more receptive to the brain solution. Use lots of ash to make an almost plasma solution, or we recommend a ¼ cup KOH per 5 gallons of water per hide (a 30 gallon trash bin can accommodate 4 hides with a full cup of KOH). The hide should be stirred in this solution several times a day for 2-4 days. You’ll need to weight the hide down with bricks or rocks as the hollow hairs of the the deer hide will float it above the solution.

- **Critical -** Do not allow the hide to freeze in the buck, it will be destroyed. The Bucking solution should remain between 45 and 70 degrees. We have installed warm water spigots at WP so we can buck and neutralize in any conditions, but be careful. Never Buck or Neutralize in Hot water. Buckskin is skin and any heat from a fire or from water that is hot enough to burn you is hot enough to burn the hide. If the hide has swelled up and taken on a bluish hue, it is bucked and ready to Grain.

- Critical - It is also critical to keep the hide from freezing while it is being grained. Try to time your Bucking so that your Graining is not done on a day that is below freezing. If this isn't possible then stoke a warm fire in the center of the fleshing beams and return the hide into water any time it is starting to freeze.

4. Graining - Graining is the process of removing the grain layer of dermis that holds the hair in place. It is done by the same method as fleshing. Try fleshing with the grain, and cross grain or against. Every hide grains differently. Buck necks are some of the hardest to grain, where doe belly comes off very easily. When you find your stroke (the perfect balance of downward and forward pressure combined with fleshing knife angle) the grain layer will come off like long strands of spaghetti. Take your time, this is the most physically demanding step. Plan on 2 hours of hard work.

5. Neutralizing - Neutralizing is the process of bringing the hide back down to a neutral PH. This takes several days in fresh flowing water. Standing water will Not neutralize. Placing the hides in a trash bin with a slow flow of moderate temperature water, with multiple stirring a day should do the trick. The hide will return to a whitish color and should feel stretchy and pliable. Neutralizing usually takes about 3 days and should not be done for more than 4 days as bacteria can begin to form.

6. Membraining - Membraining is an important overlooked step that comes right after neutralizing. Simply do a once over on both the flesh and grain side on the fleshing beam with the fleshing knife. This could take anywhere from 10 minutes to an hour depending on how thorough your work was at stages 2 and 4. Once you are done you are ready to go to step 7.

7. Drying - Only when the hide is **fully** neutralized and membrained can you hang it to dry. Congratulations you have made rawhide. Quality rawhide is the foundation to braintanning. A dried piece of rawhide will look like a stiff sheet of glue. Which is essentially what it is. Rawhide is valuable as is and can be utilized to back bows, lash spears or lash ceremonial lodges with.

8. Braining - Finally it's time for the Brains. Each animal has enough brain to tan their own hide. Blend the brain in a blender with a few cups of hot water, it will make a pinkish gray smoothie. Pour the brain smoothie into a 5 gallon bucket with several more cups of warm water (total should be about 1 gallon of liquid). Next, cram the hard dried rawhide down into the solution. This is definitely easier in a trash can with several hides. You will feel like your going to break or tear the hide, but they are very resilient. Force the hide into the solution and weight it down with a rock like you did in the buck. Give it several hours to fully hydrate. Pull the hide out every hour to open it up. Stretch it, work it on a cable or on the fleshing beam to open the fibers, then put back in the brain solution. All of this is Braining.

9. Ringing - Once the hide is fully hydrated with brains and the fibers opened up you can ring it out. Drape the hide over a fixed beam like we have on the playground. Drape it from the top and bottom to make a cylinder. Roll that cylinder up from both sides to make two donuts. Use a stout staff to run through the donuts and ring it out in both directions. Pivot the donuts and repeat until the solution is mostly out. Catch the brain solution in a bucket to reuse for a second braining.

- Freezing - This is my favorite step that is an option only in the cold winter months. The conditions will need to be 22 degrees or lower. All the fibers in the hide will be compressed after the ringing. Open them up by stretching, cabling or on the fleshing beam. Now, hang the hide up in a protected and elevated area. You are flash freezing the hide. The crystalline structures that form from the moisture in the hide open the hide up even further and make the Breaking stage much easier.

10. Breaking - Whether your hide spent the night freezing or it is right off of the ringer, it's time to get to Breaking. As you felt in the rawhide stage, a hide is essentially a sheet of glue. To transform that sheet of glue into a luxurious suede fabric requires working the emulsified fats of the brain into every fiber of the hide and manipulating those fibers until you “break them” like you would break a wild horse. This is done through stretching, pulling, cabling, working on the fleshing beam and any way you can think of to keep those fibers moving. Breaking can be done in sessions, you can break for 30 minutes and hang the hide to dry for a 30 minute rest, just be sure you don’t rest too long or the hide will stiffen up. If you have crusty sections forming you can put the hide in a plastic bag for an hour or so to allow the moisture to redistribute. Also if you are done for the day just throw the plastic bag in the freezer and pick up the breaking the next day. When you have worked the hide to completely dry (not mostly dry, completely dry), you have completed one Breaking. An experienced Tanner can “break” a hide in one session, but beginning tanners often need two sessions. Simply repeat the braining, ringing, and breaking stages a second time. At this stage the hide is much more absorbent of the brains and you will get a much better result.

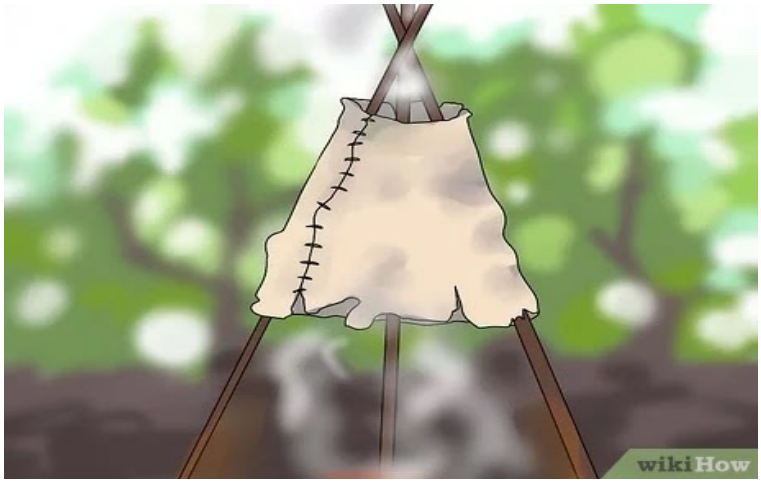
11. Smoking - If your hide is feeling pretty soft it's time to move onto the Smoking stage. You’ll need to sew, glue or clamp your hide into a cylinder with a small opening at the top, attach a jean sleeve to the bottom of the hide and elevate the hide so that the sleeve hangs right above where your smoking arm will be. You’ll need a water spray bottle, some heat gloves and several gallons of punky (rotting crumbly) wood. Get ready to crank up the smoker, you will want a good 3” coal base at the bottom, add your punk, shake it up a little bit and direct the smoking arm into the sleeve. Now spray down the sleeve repeatedly to keep it from burning. We are looking for lots of smoke with minimal heat. With a good smoke draw you’ll need about 20 minutes before you turn the cylinder inside out and repeat on the other side. With a slow draw you may need twice that amount of time.

12. Washing - This is my favorite step in the process. Your smoked hide should have a luxurious color, smell and texture. Give it a day to rest in a paper bag. Be careful where you bring the bag as the smell at this stage can be overwhelming. After a day to let the smoke set, fill a 5 gallon bucket with fresh moderate temperature water. Hand wash the hide in the bucket. The water drives the smoke even further into the hide and is the final “blessing’ on the hide. This step only takes about 5 minutes. Then do another ringing to get all the water out. You should be able to tell now that it is fabric in your hands, not a hide. It handles differently. You can do some light breaking and softening as the hide dries.

- Care - Congratulations! You have made braintan. It is quite amazing. Braintan clothing only needs to be washed once a year or so, with just water. Every time you wash it you get another softening opportunity. Be careful not to cook the hide and be careful where you leave it, as animals love to eat braintan. If treated properly your hide can last for decades or longer.

Tier 2

Present and demonstrate your Tanning GoBag (See Leaders Packing and Caching Guild)



bark tanned deer or fur

Bark tanned leather is much stiffer and utilized for things like, belts, sheathes, shoes or quivers. It follows the same steps as before to get to the rawhide stage, but then moves to a high tannic acid bath for many weeks. After you have gotten to the rawhide stage, prepare your acid bath with acorns, tea or leaves, use a ph tester to make sure it isn't too acidic. Immerse and keep above 60 degrees for several weeks, keep changing the bath every 3 or 4 days and increase the tannin acidity with each bath change. After 5 or 6 weeks you can drain, cover with neatsfoot oil and break until dry. Voila, you are now a skills gangster.

Tier 3

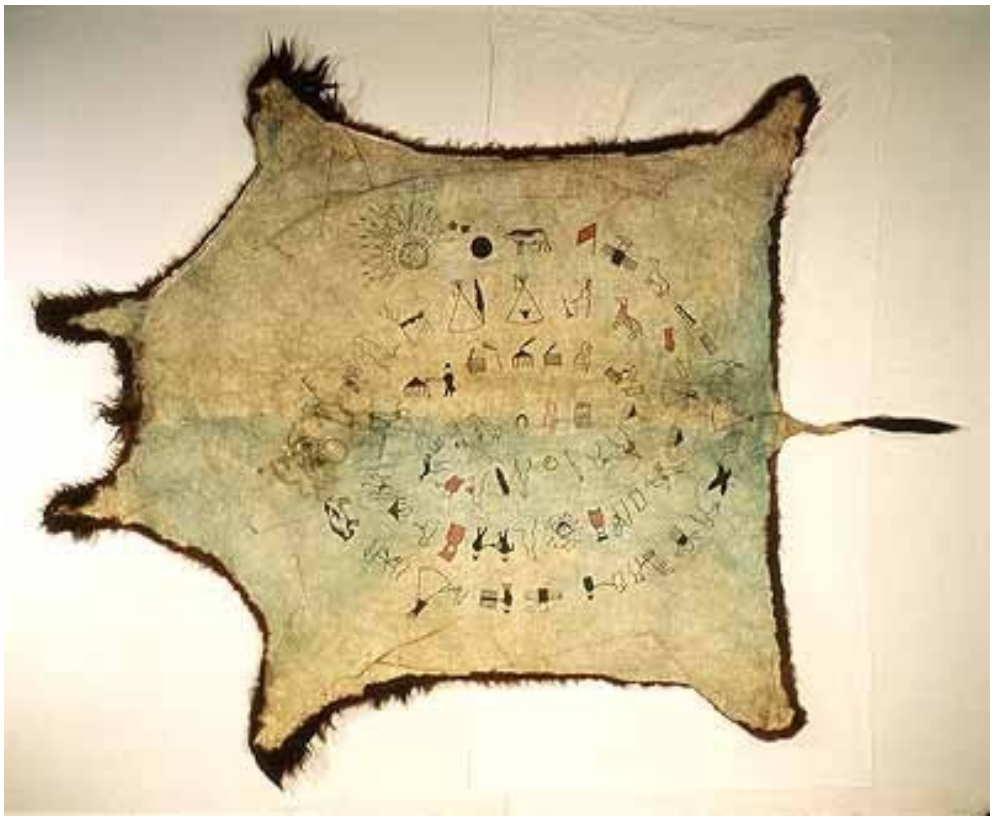
Present and demonstrate your expanded Tanning GoBag (See Leaders Packing and Caching Guild)

brain tanned bison

They say tan 100 hides before you tan a Bison. I agree. This is the most difficult animal skin to tan. First build a large rack out of 2x6x8s bolted together at the joints. Then time the procurement of a bison hide in the winter months (Ideally January). Lace up the hide and get it drying. Begin fleshing and dry scraping in earnest. Take the next month to carefully thin the entire hide. Next, beat the manure out of the fur. Wait for some warmer days with sun to brain the hide. 2 blended brains mixed with warm water and neatsfoot oil painted on and allowed to fully rehydrate for 12 hours will do the trick. Begin breaking and beating until dry (24 hours at least). Repeat the braining and breaking. Smoke, wash and lightly work until dry. Your months-long quest has likely resulted in a ceremonial item for you, your family and your community for generations to come.

Tier 4

Present and demonstrate your at Tanning Tier 4 (See Leaders Packing and Caching Guild)

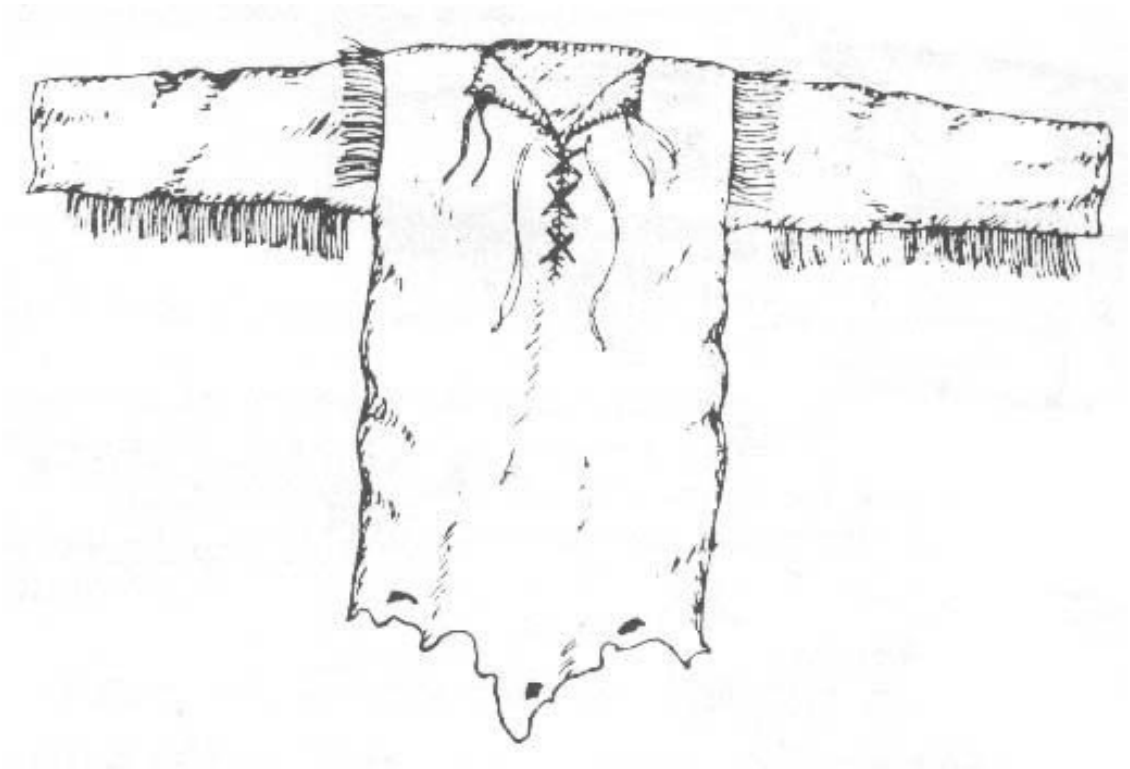


brain tanned hoodie or pants

A good brain tanned garment can last a lifetime and to make one is a true right of passage. You will need 4 to 5 medium to large brain tanned deer hides. Next you will need to cannibalize a favorite fitting garment, if you don't want to do this, go to the thrift store and shop till you find the perfect fitting pants or hoodie. Cut it carefully on the seams and lay the pieces onto your hides. Some pieces can be joined with a whip stitch but I prefer the welted seam runner stitch. Take your time and plan for a good 6 months of tanning and stitching.

Tier 5

Share your Quest and where you train remotely



Thank you for joining us in the Tanning Guild, hope to see you there.